WHAT IS CLAIMED IS:

1. A method of determining a set of large sequences from an electronic data base comprising a set $D = \{d1,...,dn\}$ of transactions di $(1 \leq i \leq n)$ in a computer system with an implemented query module, each of the large sequences on the set D of transactions di having a support value greater than or equal to a given support value S, each of the transactions di of the set D being a sequence of items of a record $E = \{e1,...,em\}$ of items ej $(1 \leq j \leq m)$ and the method comprising the following steps:

   a) determining a set L1 of large sequences from the set D of transactions, the large sequences of set L1 each comprising exactly one item of the record E, and an assigned support value S_{L1} on the sequence D of transactions each being greater than or equal to the given support value S;

   b) determining a set L2 of large sequences from the set D of transactions, the large sequences of set L2 each comprising exactly two items of the record E in a respective order R_{L2}, and an assigned support value S_{L2} on the set D of transactions each being greater than or equal to the given support value S, and nothing but sequences comprising one of the large sequences of set L1, as a partial sequence, being taken into account in determining set L2;

   c) determining a set Lk (k>2) of large sequences from the set D of transactions, the large sequences of set Lk each comprising exactly k items of record E in a respective order R_{LK}, and an assigned support value S_{LK} on the sequence D of transactions each being greater than or equal to the given support value S, and nothing but sequences comprising two of the large sequences of set Lk-1, as partly overlapping partial sequences, with the respective order R_{LK-1}, being taken into account in determining set Lk; and

   d) repeating step c) for k = k+1 and terminating the repetition of step c) when a given termination condition is fulfilled.

2. The method as claimed in claim 1, wherein the set D of transactions is searched for candidate sequences which comprise two of

the large sequences of set L1 or set Lk-1, respectively, as
partly overlapping partial sequences, in determining set L2 in
step b) and set Lk in step c), respectively, and wherein an as-
signed support value counter is registered for each candidate
sequence found for the first time, and the assigned support
value counter is incremented when the respective candidate se-
quence is determined again in searching the set D of transac-
tions.

3.   The method as claimed in claim 1, wherein:
     -   the set D of transactions is searched for candidate se-
         quences comprising one of the large sequences of set L1, as
         a partial sequence, when determining set L2 in step b), and
         an assigned support value counter is registered for each
         candidate sequence found for the first time, and the as-
         signed support value counter is incremented when the respec-
         tive candidate sequence is determined again in searching the
         set D of transactions; and
     -   a candidate set of sequences is formed, when determining set
         Lk (k>2) in step c), which set comprises all combinations in
         pairs of the sequences of set Lk-1, and of the set D of
         transactions those transactions are defined which comprise
         at least one sequence of the candidate set, and the support
         value is determined for those sequences of the candidate set
         for which a transaction was found that comprised this se-
         quence.

4.   The method as claimed in claim 2 or 3, wherein a display value
     is generated and updated for each assigned support value coun-
     ter to indicate the transaction for which the assigned support
     value counter was last incremented.

5.   The method as claimed in claim 3 or 4, wherein only those se-
     quences of the candidate set of sequences corresponding to all
     combinations in pairs of the sequences of set L1 are taken into
     account of which the first item lies within a given range of
     values.

6. A computer program product for determining a set of large se-
quences from an electronic data base comprising a set D =
$\{d_1, \ldots, d_n\}$ of transactions di ($1 \leq i \leq n$) in a computer system
with an implemented query module, each of the large sequences
on the set D of transactions di having a support value greater
than or equal to a given support value S, each of the transac-
tions di of the set D being a sequence of items of a record E =
$\{e_1, \ldots, e_m\}$ of items ej ($1 \leq j \leq m$) and the product comprising the
following means:

a) means recorded on an electronic storage medium for determin-
ing a set L1 of large sequences from the set D of transac-
tions, the large sequences of set L1 each comprising exactly
one item of the record E, and an assigned support value S_{L1}
on the sequence D of transactions each being greater than or
equal to the given support value S;

b) means recorded on the electronic storage medium for deter-
mining a set L2 of large sequences from the set D of trans-
actions, the large sequences of set L2 each comprising ex-
actly two items of the record E in a respective order R_{L2},
and an assigned support value S_{L2} on the set D of transac-
tions each being greater than or equal to the given support
value S, and nothing but sequences comprising one of the
large sequences of set L1, as a partial sequence, being
taken into account in determining set L2;

c) means recorded on the storage medium for determining a set
Lk (k>2) of large sequences from the set D of transactions,
the large sequences of set Lk each comprising exactly k
items of record E in a respective order R_{LK}, and an assigned
support value S_{LK} on the sequence D of transactions each be-
ing greater than or equal to the given support value S, and
nothing but sequences comprising two of the large sequences
of set Lk-1, as partly overlapping partial sequences, with
the respective order R_{LK-1}, being taken into account in de-
termining set Lk; and

d) means recorded on the electronic storage medium for repeat-
ing step c) for k = k+1 and terminating the repetition of
step c) when a given termination condition is fulfilled.

7.   An integrated sequential analysis system, comprising:

-    an electronic data base comprising a set $D = \{d1,...,dn\}$ of transactions di $(1 \leq i \leq n)$, each of the large sequences on the set D of transactions di having a support value greater than or equal to a given support value S, each of the transactions di of the set D being a sequence of items of a record $E = \{e1,...,em\}$ of items ej $(1 \leq j \leq m)$;

-    a query module comprising a query means coupled to the data base and a processing means for detecting query parameters and generating queries to the query means;

-    means for determining a set L1 of large sequences from the set D of transactions, the large sequences of set L1 each comprising exactly one item of the record E, and an assigned support value S_{L1} on the sequence D of transactions each being greater than or equal to the given support value S;

-    means for determining a set L2 of large sequences from the set D of transactions, the large sequences of set L2 each comprising exactly two items of the record E in a respective order R_{L2}, and an assigned support value S_{L2} on the set D of transactions each being greater than or equal to the given support value S, and nothing but sequences comprising one of the large sequences of set L1, as a partial sequence, being taken into account in determining set L2;

-    means for determining a set Lk (k>2) of large sequences from the set D of transactions, the large sequences of set Lk each comprising exactly k items of record E in a respective order R_{LK}, and an assigned support value S_{LK} on the sequence D of transactions each being greater than or equal to the given support value S, and nothing but sequences comprising two of the large sequences of set Lk-1, as partly overlapping partial sequences, with the respective order R_{LK-1}, being taken into account in determining set Lk; and

-    means for repeating step c) for k = k+1 and terminating the repetition of step c) when a given termination condition is fulfilled.